

CLAIMS

1. A machine for railway switching applications, comprising:
a fixed casing;
a control rod adapted for sliding movement between two alternative positions
5 relative to said casing, said control rod being connectable to at least one
movable switching element of a railway switching application;
a fixed plate mounted to said casing, said fixed plate having at least one fixed
seat; and
at least one operating pin slidably positioned in said control rod, said operating
10 pin being adapted to selectively enter said at least one fixed seat to lock
said control rod in either of said two positions relative to said casing.
2. The machine recited in claim 1, further comprising;
a sliding device, said sliding device having a housing;
at least one slide mounted to said sliding device, said at least one slide
15 contacting said control rod;
at least one moving seat on said slide, said at least one moving seat being
adapted to receive said at least one operating pin; and
at least one operating rod extending from said housing of said sliding device,
said sliding device being adapted for relative sliding movement between
20 said housing and said operating rod to thereby move said at least one
slide and selectively engage said operating pin with one of said at least
one moving seat, for movement of said control rod, and said at least
one fixed seat, for locking of said control rod.
3. The machine recited in claim 2, wherein:
25 said at least one slide is mounted to said housing of said sliding device; and
said at least one operating rod is fixedly attached to said casing, such that said
sliding device housing moves relative to said casing.
4. The machine recited in claim 2, wherein:
said at least one slide is mounted to said at least one operating rod of said
30 sliding device; and
said housing is fixedly attached to said casing, such that said at least one
operating rod moves relative to said casing.

5. The machine recited in claim 2, further comprising a stroke limiter adapted to limit the stroke of said slide relative to said casing.

6. The machine recited in claim 5, wherein said stroke limiter is mounted to said slide.

5 7. The machine recited in claim 5, wherein said stroke limiter is mounted to said casing.

8. The machine recited in claim 2, further comprising a power unit adapted to generate said relative sliding movement between said housing and said operating rod of said sliding device.

10 9. The machine recited in claim 8, wherein said power unit is internal to said casing.

10. The machine recited in claim 8, wherein said power unit is external to said casing.

11. The machine recited in claim 8, wherein:
15 said sliding device housing includes a cylinder;
said operating rod comprises a piston rod; and
said power unit comprises a fluid pressure supply.

12. The machine recited in claim 2, wherein:
said at least one slide has two of said moving seats; and
20 said control rod has two of said operating pins.

13. The machine recited in claim 2, further comprising at least one stabilization piston mounted on said sliding device, said stabilization piston being adapted to selectively stabilize a desired relative configuration of said at least one operating rod and said housing of said sliding device.

25 14. The machine recited in claim 13, wherein said at least one stabilization piston is mounted to said at least one operating rod of said sliding device.

15. The machine recited in claim 1, further comprising:
at least one chamber on said casing;
an occlusion plate in said at least one chamber, said plate being adapted to
30 occlude said at least one fixed seat on said fixed plate, thereby resisting
entry of said operating pin into said at least one fixed seat.

16. The machine recited in claim 15, further comprising a spring in said at least one chamber, said spring being adapted to bias said occlusion plate to occlude said fixed seat.

17. A machine for selective movement of the movable V-point of a railway moving point frog assembly, comprising:

a fixed casing adapted to function as a railroad tie beneath the rails of intersecting sections of railroad tracks and the moving point frog assembly between them;

a control rod mounted within said fixed casing, said control rod being adapted for sliding movement between two alternative positions relative to said fixed casing, said control rod being connectable to a movable V-point of a railway moving point frog assembly located above said fixed casing.

18. The machine recited in claim 17, further comprising:
a fixed plate mounted to said casing, said fixed plate having at least one fixed seat; and

at least one operating pin slidably positioned in said control rod, said operating pin being adapted to selectively enter said at least one fixed seat to lock said control rod in either of said two positions relative to said casing.

19. The machine recited in claim 18, further comprising;
a sliding device, said sliding device having a housing;
at least one slide mounted to said sliding device, said at least one slide contacting said control rod;

at least one moving seat on said slide, said at least one moving seat being adapted to receive said at least one operating pin; and

at least one operating rod extending from said housing of said sliding device, said sliding device being adapted for relative sliding movement between said housing and said operating rod to thereby move said at least one slide and selectively engage said operating pin with one of said at least one moving seat, for movement of said control rod, and said at least one fixed seat, for locking of said control rod.

20. The machine recited in claim 19, further comprising a power unit

adapted to generate said relative sliding movement between said housing and said operating rod of said sliding device.

21. The machine recited in claim 20, wherein said power unit is internal to said casing.

5 22. The machine recited in claim 20, wherein:
said sliding device housing includes a cylinder;
said operating rod comprises a piston rod; and
said power unit comprises a fluid pressure supply.